

What is claimed is:

1. A fiber optic cable comprising:  
an outer jacket;  
a first core tube positioned within the outer jacket; and  
a first plurality of optical fibers positioned within the first core tube;  
wherein the cross-sectional area of the first plurality of optical fibers is less than 60 percent of the cross-sectional inside area of the first core tube and wherein the length of each optical fiber in the first plurality of optical fibers is between 1.0 and 1.001 times the length of the first core tube.
2. A fiber optic cable according to claim 1, further comprising:  
a plurality of strength members positioned between the outer jacket and the first core tube.
3. A fiber optic cable according to claim 1, wherein the first core tube is made of a material selected from the group consisting of: polyvinyl chloride, polyvinylidene fluoride homopolymer, and polyvinylidene fluoride copolymer; and  
wherein the outer jacket is made of a material selected from the group consisting of: polyvinyl chloride, polyvinylidene fluoride homopolymer, and polyvinylidene fluoride copolymer.

4. A fiber optic cable according to claim 1, further comprising:
- a second core tube positioned within the outer jacket;
- a second plurality of optical fibers positioned within the second core tube;
- wherein the cross-sectional area of the second plurality of optical fibers is less than 60 percent of the cross-sectional inside area of the second core tube and wherein the length of each optical fiber in the second plurality of optical fibers is between 1.0 and 1.001 times the length of the second core tube.
5. A fiber optic cable according to claim 4, wherein the second core tube is aligned substantially parallel to the first core tube, and outer jacket defines a tearable web section in between the first and second core tubes.

6. A fiber optic cable according to claim 1, further comprising:
- a second core tube positioned within the outer jacket;
  - a second plurality of optical fibers positioned within the second core tube;
  - wherein the cross-sectional area of the second plurality of optical fibers is less than 60 percent of the cross-sectional inside area of the second core tube and wherein the length of each optical fiber in the second plurality of optical fibers is between 1.0 and 1.001 times the length of the second core tube;
  - a third core tube positioned within the outer jacket;
  - a third plurality of optical fibers positioned within the third core tube; and
  - wherein the cross-sectional area of the third plurality of optical fibers is less than 60 percent of the cross-sectional inside area of the third core tube and wherein the length of each optical fiber in the third plurality of optical fibers is between 1.0 and 1.001 times the length of the third core tube.
7. A fiber optic cable according to claim 6, wherein the first, second and third core tubes are helically wound with respect to each other.
8. A fiber optic cable according to claim 6, further comprising a plurality of electrical conductors positioned within the outer jacket.

9. A fiber optic cable according to claim 6, wherein the first, second and third core tubes and the plurality of electrical conductors are helically wound with respect to each other.